

The Biosphere Reserve in the Land of a Thousand Ponds





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Sachsenforst





Ancient cultivated region

The Upper Lusatia heath and pond region has evolved over many centuries as a result of human use. The Slav settlers who came here after 600 A. D. called the land which was covered in bogs and forests »Łužica« (marshland), to which the German name »Lausitz« is related. The first documented evidence of the building of fish ponds dates from the year 1248.



Oxbow lakes of the River Spree near Neulömischau AM

By the 15th and 16th century, pond fishing was already an important business activity. Efficient pond management developed from the beginning of the 18th century and at that time it was the most profitable usage of this part of Upper Lusatia. The Biosphere Reserve is situated in the centre of this old cultivated region. It comprises a total of more than 350 ponds in dune forests, marshy areas, sparse fields, flood plains and heathlands – an extraordinary variety of habitats for rare plants and animals.

Balloon trip near Lippitsch HM

Welcome to the Biosphere Reserve

The headquarters of the Biosphere Reserve is housed in an old, rectangular farmyard in Wartha, enclosed on all sides by buildings. This is the focal point of the expertise that then flows into the practical side of nature conservation work and the place where environmental education activities and public relations are planned. The HOUSE OF A THOUSAND PONDS is also located in the farmstead, offering visitors to the heath and pond region a wealth of information, the chance to visit the permanent exhibition or to sample regional specialities in the bistro. So all in all, the HOUSE OF A THOUSAND PONDS is the ideal starting point for excursions and guided tours of the heath and pond region, to watch water fowl, or for a trip to the naturally sustained pond farm.

Nature and adventure trails

The Nature Trail Guttauer Teiche und Olbasee and the Seeadlerrundweg take visitors past characteristic features of the unique cultural landscape.

Guided tours, excursions and more

An extensive programme of guided hikes, excursions, tours, camps and seminars for groups of children and teenagers and old and young nature lovers alike provide a deeper understanding of the complex interdependencies of ecosystems

For the calendar of events and more detailed information, please contact ------ HOUSE OF A THOUSAND PONDS, Tel.: +49 (0)35932/36560, Fax: +49 (0)35932/36561, Internet: www.haus-der-tausend-teiche.de

House of a Thousand Ponds SB



»Biosphere Reserve« – the key phrase

There are currently 621 biosphere reserves in various parts of the world. They are the »stepping stones« of the UNESCO »Man and the Biosphere« programme, model regions in which nature conservation and sustainable management are intended to contribute to the preservation of unique natural and cultivated regions and to develop them further.

In biosphere reserves, the coexistence of man and nature should be moulded so that a balance is reached whereby biological diversity is present on one hand and man finds opportunities for sustained economic and cultural development on the other. The work of the biosphere reserves is thus determined by the following main priorities:

- ----- demonstration of sustainable economic development,
- well-founded ecological environmental research and environmental monitoring,
- positive environmental education and training.

Each biosphere reserve consists of core, maintenance and development zones. The core zones are strictly protected subareas for preserving biological diversity. Maintenance zones surround the core zones; naturally sustainable uses are possible here. Finally, development zones allow a wide range of sustainable uses resulting from the management of land, forests and ponds, tourism and systematic residential development.

The Kauppa ponds MF



Getting around in the Biosphere

The coexistence of human beings and nature is also shapes tourism in the Biosphere Reserve. Our guests appreciate the heath and pond region because it is where they find peace, space for their children, recreation for the whole family and a part of the countryside without noise or exhaust fumes. They want to experience nature, are curious about our villages and their people and they want to see what sustainable management means to us.

Biosphere hosts

In the Biosphere Reserve, our guests encounter outstanding hosts. The Biosphere Reserve rewards accommodation and fine dining establishments as well as owners of holiday apartments who contribute in a particular way to the promotion of regional economic cycles, to the preservation of the environment and to the maintenance of the cultural landscape. 14 accommodation providers (hotels, guesthouses, camping sites and holiday apartments) currently bear the distinction of »Biosphere Host«.

A charming network of cycle and walking paths opens up the heath and pond region with its scenic beauty and villages. Longdistance cycling and hiking trails such as the Spreeradweg or the Froschradweg pass through the Biosphere Reserve. The Seeadlerrundweg takes visitors to the beauties of the landscape and the characteristic features of the culture inherent to the Lusatian pond region and to the large and the small attractions nestled in the Biosphere Reserve.

Recommended ----- map »Wander- und Radwanderkarte Oberlausitzer Heide- und Teichlandschaft Blatt 4, Biosphärenreservat« published by Bautzen, Sachsen Kartographie GmbH Dresden (Hrsg.) in 2012



At a glance

Biosphere Upper Lusatian Heath and Pond Region

Location North of Bautzen between Hoyerswerda in the northwest

and Niesky in the east

Natural areas

Upper Lusatian heath and pond region between the Upper Lusatian plains in the south and the Upper Lusatian mining region in the north, part of the Saxon lowland region, altitude 80-180 m above sea level

Climate

Subcontinental, inland climate of Eastern Germany

Size and land use

30,102 hectares, comprising 13,139 ha nature conservation area, 2,750 ha watercourses, 340 ha moors, 1,100 ha heath and dry grassland, 14,160 ha forest, 10,530 ha agriculture, 2,100 ha mining rehabilitation land (open cast brown coal mining), 1,100 ha built-up areas

Settlement

58 villages with around 10,000 speaking region, population density: 33 inhabitants per km²

nhabitants, bilingual Sorbian-

Friedersdorf Nature Reserve Stati

Farm shops and direct agricultural marketing

Bauernhof Ladusch in Kreba-Neudorf Meat and sausage specialities.

extensive range of regional products Nieskyer Straße 26, 02906 Kreba-Neudorf, Tel.: +49 (0)35893/6300

Bio-Betrieb Spreehof in Göbeln

Meat and sausage specialities, extensive range of regional products Am Spreewehr 14, 02694 Großdubrau OT Göbeln, Tel.: +49 (0)35932/32237

Bio-Betrieb Schäferei Müller in Kaschel

Lamb, sheep products Kiefernweg 44, 02905 Klitten OT Kaschel, Tel.: +49 (0)35895/50462

The most important watercourses

Spree, Kleine Spree, Schwarzer Schöps, Weigersdorfer Fließ

Development zone –

harmonious cultivated region

14,949 ha of heavily impacted

areas of the countryside, such

as residential areas or cultivat-

ed fields; objective: 14,949 ha

of landscape areas significantly

characterised by human use

in the form of built-up areas

ecological functions and the

character of the countryside

and villages are preserved

Administration of the

Incorporated within the Office

for Large Conservation Areas,

Reserve is the responsibility

of the state-owned company

Sachsenforst. It consists of the

organisational units of Internal

Administration and Public

Relations, the Department

of Regional Development, the

Department of Public Works/

Services (Forestry Department)

and Nature Watch. Departmen-

tal supervision is decentralised.

administration of the Biosphere

Biosphere Reserve

or farmland: careful use so that

Significant distribution of rare plants and animal

304 higher plant species on the »Red List« for Saxony, 94 species of breeding birds, a total of over 1,200 plant and animal species on the »Red List«

Zoning of the Biosphere Reserve

Core zone 1,124 ha - complete reserve land without any utilisation

Maintenance zone 12,015 ha nature conservation area, areas with naturally sustainable use, e.g. pond farming

Development zone – regeneration area 2,014 ha of areas heavily affected by former use, particularly by brown coal mining; objective: extensive restoration of the ecosystem and the landscape appearance

Addresses of interest

Pachows Hofladen

Bakery and confectionary products, meat and sausages extensive range of agricultural products from the region Hermsdorfer Weg 7, 02999 Lohsa OT Driewitz, Tel: +49 (0)35724/50747

Gärtnerei Teske in Klix Seasonal vegetables Spreewieser Straße 15, 02694 Klix.

Tel.: +49 (0)35932/30604

Gärtnerei Pötschke in Gleina Seasonal vegetables Zur Gärtnerei 17, 02694 Malschwitz OT Gleina,

Imker Röhle in Klitten Honey and beeswax candles Feldweg 94, 02906 Klitten,

Tel.: +49 (0)35825/50960

Tel.: +49 (0)35932/30525

Pond farmers with direct marketing

Teichwirtschaft Bergmann Upper Lusation organic carp Dürrbacher Str. 351, 02906 Klitten, Tel.: +49 (0)35895/50409

Teichwirtschaft Funke Zum Altteich 3, 02906 Hohendubrau OT Weigersdorf, Tel.: +49 (0)35932/30716

Teichwirtschaft Ringpfeil Upper Lusatian organic carp Mühlenweg 3, 02699 Königswartha OT Wartha,

Tel.: +49 (0)35726/50233 Teichwirtschaft Lohsa

Tel.: 035728/85851

Schloßstr. 17, 02943 Boxberg / O.L. OT Uhyst,

oration between citizens and their (own) area supervisor can thus be achieved

Biosphärenreservatszentrum Wartha (Administration and Nature Watch Department Centre), Warthaer Dorfstraße 29, 02694 Malschwitz OT Wartha, Tel.: +49 (0)35932/365-0, Fax: +49 (0)35932/365-50

departments has its own

Nature Watch site. Close collab-

Naturschutzstation Friedersdorf (Nature Watch Department West), Altfriedersdorfer Straße, 02999 Lohsa Ortsteil Friedersdorf, Tel.: +49 (0)35724/51075, Fax: +49 (0)35724/55171

Alte Försterei Mücka (Nature Watch Department East), Am Sportplatz 231, 02906 Mücka, Tel.: +49 (0)35893/50872

Internet ---- www.biosphärenreservat-oberlausitz.de

Each of the three supervisory



Visiting the House of a Thousand Ponds KN

Further Information

Environmental education in the Biosphere Reserve

Regional partners are responsible for environmental education, in particular the Förderverein für die Natur der Oberlausitzer Heide- und Teich-

landschaft e. V. The latter organises and supports the extensive programme of events, a large number of seminars, guided tours and also hands-on activities, above all for children and teenagers.

Internet ----- www.biosphä-

Some further reading (Selection)

Biosphärenreservatsplan (3 books in slipcase) — on sale in the House of a Thousand **Ponds**

Oberlausitzer Heide- und Teich-

renreservat-oberlausitz.de/ umweltbildung

landschaft: Eine landeskundliche Bestandsaufnahme, volume 67 of the series »Landschaften in Deutschland – Werte der deutschen Heimat«, Bastian et al./Sächs. Akademie d. Wissenschaften Leipzig (Hrsg.), Böhlau Verlag Cologne Weimar Vienna (2005)



House of a Thousand Ponds

Biosphere Reserve farmstead the pond scenery invites its guests to take a look There is a bistro with typical at its interactive exhibition of the food and drink found in the An adjacent waterside

adventure playground entices visitors to have fun and see what they discover.

tausend-teiche.de Homepage: www.haus-dertausend-teiche.de

Teichwirtschaft Rüdiger Richter Hoyerswerdaer Str. 18 02906 Kreba-Neudorf, Tel.: +49 (0)35893/6418

Teichwirtschaft Kittner Dorfstr. 27, 02906 Quitzdorf am See OT Petershain, Tel.:+49 (0)35893/6416

»Guttauer Teiche und Olbasee«

Teichwirtschaft Semmer Zum Gutshof 1, 02694 Großdubrau OT Kauppa,

Tel.: +49 (0)35934/6439 Teichwirtschaft Hempel

Nr. 1d, 02627 Radibor OT Milkel, Tel.: +49 (0)35934/6436

Upper Lusatian heath and pond region. The exhibition spirits visitors away into the »Land of a Thousand Ponds«, using pond management in Upper Lusatia to explain the Biosphere Reserve and its tasks and demonstrating interactively the interdependencies between humans and

Services in and around the

 A very diverse programme of seminars and lectures

 Guests can obtain information material and tourist informa tion about the region in the

House of a Thousand Ponds Warthaer Dorfstraße 29, 02694 Malschwitz OT Wartha Telephone: +49 (0)35932/36560 E-mail: kontakt@haus-der-

Variety of habitats – coexistence of man and nature

Watercourses

Rivers, streams and ditches are the landscape's lifelines. The Schwarzer Schöps and the Weigersdorf stream and numerous smaller streams and ditches run through the Biosphere Reserve. Meadows containing streams and rivers, fast-flowing and slowrunning water, fordable places and deep scour pools and steep and flat banks form ideal living conditions for many animals and plants in the Biosphere Reserve. The following can still be seen: kingfisher, otter, water shrew, striped dragonfly/banded demoiselle (calopteryx splendens) and common sandpiper, Caspian spined loach and brook lamprey, rare water starworts, branched bur-reed and marsh marigold. The ditch system, which has been established over the centuries for filling and draining the ponds, links wetlands and ponds and forms routes for the spread of nomadic fauna species.



Great Nati Pond, one of the Kreba ponds RMS

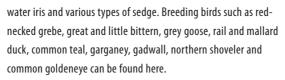
The flat ponds with their wild banks, silted areas and strips of reeds with their gradual transition to meadows and forests, provide a home for plants and animals which have long disappeared in other areas. To be found on the banks are bulrushes, hops, narrow-leaved cattail, branched bur-reed, arrowhead, the yellow

Moors, heath, thin sandy grasslands

The Lusatian marshland was once covered in moors and bogs. With the expansion of pond management, many moors were transformed into ponds. Bogs and moors were later drained for agriculture or destroyed by peat farming. The sinking of ground water over a large area as a result of brown coal mining led to the almost complete destruction of the swamp habitat. Less than 1% of the original swampland is left.



at the edge of ponds low in nutrients and in some low ground in forests. A lack of nutrients and a microclimate typical for the swamps produce a totally individual area of plants and animals. There are sphagnum mosses, cranberry, bog bilberry, harestail and common cottongrass, bog rosemary/marsh andromeda (andromeda polifolia), types of sundew and bladderwort, beakrush, cross-leaved heath, marsh/purple cinquefoil (potentilla palustris), marsh clubmoss and also many types of insects that cannot find a food source away from the swamp. Spotted crake (porzana porzana), common snipe and crane have their nesting grounds in the reed on the edge of the swamps.



The ponds and their surrounding area are a refuge for amphibians and reptiles such as moor frog, grass frog, common and green toad, common spadefoot/common Eurasian spadefoot toad/European spadefoot (pelobates fuscus), fire-bellied toad, smooth newt, sand lizard and grass snake. Tree frogs and water frogs give a concert on summer evenings. Most of the other animals in the pond are also active at dusk or at night. Otter, polecat, noctule bat and Daubenton's bat occupy their territory when people are

Continued management of the ponds guarantees their conservation. Lusatian carp, tench, pike, Wels catfish, lake sturgeon and zander continue to be the most important export items of the heath and pond region. Freshly caught or smoked, they can also be purchased direct from the pond management companies or can be sampled as a cooked specialty in the restaurants all over Upper Lusatia.





Fish catch by

Forests

Forests are the lungs of the heath and pond region. The forests of the Upper Lusatian heath used to be mainly mixed forests of oak, pine, birch and hornbeam. Wild stocks of this kind belong to the valuable forest biotopes. In the Biosphere Reserve, we also still find them as pine and oak forests, which were once characteristic of the Upper Lusatian Heath, as berry bush and pine forests with abundant quantities of bilberries and cranberries, as lichen-pine forests in very dry locations and in dunes, or as marsh tea and pine woods on the edge of the moors. The major pine forests are gradually being retransformed into mixed forests suitable for the area. Permanent forest management in the Biosphere Reserve is now aiming at the development of wild



Animals: sea eagle, black woodpecker, red deer, wolf. The wood from the forests of the Biosphere Reserve is valuable regrowth raw material and is processed in the regional sawmills, for use in the paper industry or as fuel. The honey enthusiast loves the dark colour and the typical malt flavour of forest honey. You can eat forest honey along with heath and other types of blossom honey at the beekeeper's and in various farm shops.

Fields, meadows and pastures

Even fields, meadows and pastures moulded by agriculture have their place in the biosphere of the heath and pond region. In the last few decades, many traditional uses have been relinquished. Some areas have been amalgamated and drained. Boundary ridges, hedgerows, lanes, groves and clearance cairns have disappeared. The use of herbicides has caused a drastic decrease in wild field herbs. Without wild herbs there is no food for insects and, in the end, partridges and hares have no means of existence. Together with the local farmers, the Biosphere Reserve is showing that this development is not irreversible. And so chemical pesticides and mineral fertilizers are no longer used on »wild herb fields«. The objective is to reestablish the abstract plant community characteristic of our cultivated region, in conjunction with the cultivation of old types of grain crops and other types of cultivated plants.

Over the past few decades, grassland management has also changed. The mosaic of small multi-purpose areas has disappeared. The drawdown of the groundwater table and earlier and more frequent crops in addition to fertilisation have led to the rise of crops with little variety and with few competitive grasses. With the flowers and the butterflies, colours have also disappeared from the meadows. As a habitat for plants and animals, intensively managed grassland is of only minor significance. In the Biosphere Reserve there are still meadows and pastures with many species and also special treasures — orchid pastures. This means that the maintenance and development of the valuable grasslands by means of care and use in line with

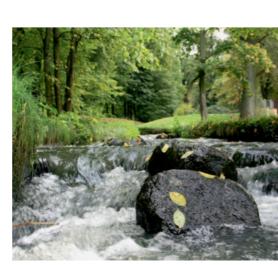


Blossoming apple

nature conservation are important objectives. Orchid pastures must only be cut after the seeds have matured. During the time when the breeding inhabitants of the meadows are raising their young, there is no grazing or mowing. Large and small agricultural concerns, family agricultural businesses and agricultural cooperatives, support the work of the Biosphere Reserve and demonstrate that conservation of nature and the environment can certainly go hand-in-hand. Discover for yourself the quality and taste of our healthy agricultural products. Fruit and vegetables, meat and sausage specialties from cattle, honey, jams etc. represent what is available in the direct marketers' farm shops, in the weekly markets throughout the whole region and in the natural product markets in the Biosphere

Positive landscape development

Permanent, varied use forms the core of the Biosphere Reserve's policy for the protection and development of nature and the landscape. This use is supplemented by a large number of procedures and projects which quite specifically improve the status of biotopes and thereby the living conditions of plants and animals. An important task is the renaturation of the streams and rivers which have been lined with much concrete and rubble in the past. It is now already apparent that the renaturation process, the demolition of weirs or their modification by building rough ramps and fish ladders and the restored flow of the waters in conjunction with suitable use of the meadows are all actually bringing back lost species of animals and plants. Even in the Biosphere Reserve, the numbers of the white stork can only be guaranteed by maintaining the nests and by taking measures to protect its habitat. Pastures near the villages are, therefore, being covered with water and maintained as wetlands and the storks are again finding food here. The members of the landschaft e. V. [Nature Conservation Association] are doing vital work in maintaining the storks' nests and in renovating the bases



Fish ladder by Uhyst DW





Join in – it's our biosphere

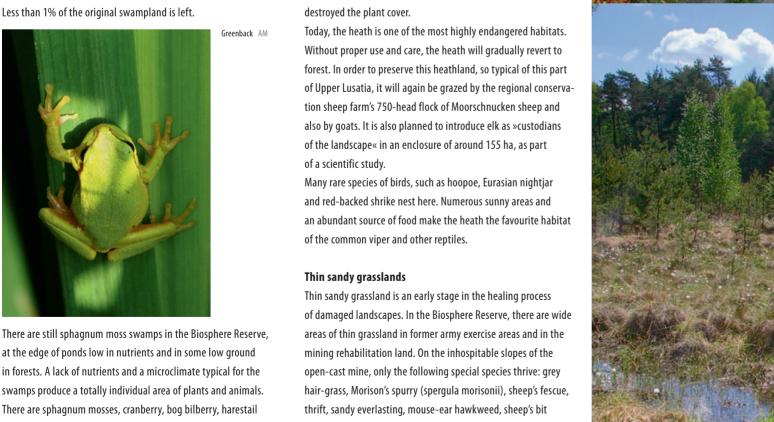


Tending to the heath RMS

Without the help of many people from the heath and pond region, it is impossible to carry out either the practical or the scientific work which keeps the Biosphere Reserve alive.

Most people realise that nature and landscape and the wide variety of the animal and plant species which occur here are part of the rare riches of the heath and pond region. They all know that bats, otters and storks will only continue to create publicity for Lusatia, if people show consideration for the needs of these and other threatened species.

The Förderverein für die Natur der Oberlausitzer Heide- und Teichlandschaft e. V shows that everyone can do something to ensure that the storks remain in Upper Lusatia and that the entire heath and pond region can be maintained as a unique cultivated region and further developed within the context of the coexistence of man and nature.



(jasione montana), small forget-me-not, Carthusian pink and

maiden pink. Thin sandy grassland is now very rare in Germany.

Most of its inhabitants, many species of beetle, grasshopper and

Neuliebel — Western expanse of riparian forest DW

butterfly, as well as lizards, are among the species threatened

Carp in the huge aquarium in the House of a Thousand Ponds KN

Wet and dry — in the heath and pond region, extremes are found

Even the heath has been created by man. Uncontrolled exploita-

tion of the forests as a result of grazing and tree-felling have led

to the depletion of the sandy soils. Finally, only tough grasses

with little food value grew there, along with stunted trees and

bushes. The humous topsoil was constantly removed and used as

bedding in stables or as fertilizer in the fields. The heath was also

used as an army exercise terrain, and the exercises regularly